



This Month's Question of the Month – During contact with an energized component, what amperage level will cause loss of muscle control in a male, in a female? – *See the correct answer on page 2.*

● Note From The Chief

Field inspectors are continuing to find many installations with serious corrections where the inspection is not ready to be passed. In January alone, L&I inspectors issued 4,092 serious corrections. Any one of these corrections is considered serious enough to prevent inspection approval or the authorization to energize power. Each installer and contractor should review the *Electrical Currents – Note From The Chief*, November and December 2010, for more on this problem. (All back issues are available at:

<http://www.lni.wa.gov/TradesLicensing/Electrical/WhatsNew/Currents/default.asp>.)

Inspectors are expected to stop the inspection process and to issue a trip fee for the inspection not being ready when they encounter inspection stopping problems. As stated in the November 2010, *Electrical Currents*, "The contractor must then pay the assessed trip fee, make the corrections noted, and do the required quality assurance before requesting a re-inspection. When the inspector returns, the remainder of the job will be inspected, including the repairs for the corrections previously noted. The job should be ready to be passed each time an inspection request is made."

Being "ready to be passed" means that the contractor and/or the assigned Administrator/Master Electrician have ensured that the work is installed to code and complete before the inspection request is made. Contractors who continually have the same serious violations may be issued additional civil penalties for their improper work.

● "Classified" Retrofit Kits

Electrical testing laboratories are increasingly using the electrical testing laboratories' classification process in lieu of product listing or field evaluation as a safety evaluation method for retrofit kits and other product evaluations – especially for LED lighting and other energy conservation measures. L&I has not accepted the classification process as a substitute for listing or field evaluation, except for replacement circuit breakers. Unlike product listing, testing laboratories do not consider classification as a complete product evaluation process.

Testing laboratories have told L&I that they cannot assure the use of a classified product without field inspection by the electrical inspector. Testing laboratories have also indicated that the use of a classified product should be restricted to within a product that is also listed by the classifying laboratory.

L&I will not allow the use of a classification label for:

- Any work related to the use of a Class B, random inspection, inspection label;
- Ensuring product acceptability for stand-alone electrical equipment; or
- Use on any equipment that has an engineer approval label.

L&I will allow the use of a classification label if all the following conditions are met:

- The classified product is only used in a retrofit situation.
- The installer:
 - Buys an electrical permit and gets all electrical work inspected;
 - Follows all the manufacturer's instructions and codes;
 - Makes a copy of the manufacturer's instructions available to the inspector during the inspection;

Safety Tip of the Month!

The impedance of the fault current path plays a critical role in removing dangerous voltages from metal parts and preventing electric shock by facilitating the opening of the branch-circuit overcurrent protection device.

Be sure you don't take this path for granted. Do not rely on the earth as a grounding conductor. Terminate equipment-grounding conductors properly and make sure all mechanical connections are secure.

One final tip: Only a GFCI can protect you from direct contact with an energized conductor.

- Applies a label, made of a background color contrasting to the listed product, in a visible location near the classified product that says, *“This equipment contains a Classified product that may present a risk of electrical hazard if the manufacturer’s instructions are not followed exactly.”* The label’s font must be Ariel size 16 bold. This label may be an identification plate as described in WAC 296-46B-100(38) or an adhesive label approved by the electrical inspector. This label is in addition to any labeling required by the manufacturer’s instructions or the electrical standard used to manufacture the classified product; and
- Removes all parts of the replaced component(s) so that the new configuration is clearly evident to the consumer (e.g. Remove the ballast and associated wiring when a LED classified retrofit kit is used to replace fluorescent ballast).
- The classified product is used to replace a component(s) on or within a product already listed or field evaluated by the testing laboratory classifying the replacement component – that is: a UL classification label should only be used within a UL listed product; an ETL classification label should only be used within an ETL listed product, etc.

● WAC Rule Public Hearing

Before the Governor’s Executive Order last fall, the Electrical Program opened the electrical rules for proposed changes. After carefully evaluating each of these proposals, the department determined that the proposals did not meet the Executive Policy Office’s guidelines for moving forward with a critical rule change. The only section that will be amended will be to implement of SHB 2546 – a requirement for additional trainee classroom education as required by the legislature in the 2010 legislative session.

At the January 27th Electrical Board meeting, the board discussed the options for rule making (e.g. NEC 2011 adoption, technical and administrative changes, etc.) and unanimously recommended to only move forward with the implementation of SHB 2546.

A public hearing will be held April 26, 2011, on the rule proposal at the L&I building – 7273 Linderson Way, Tumwater. Written comments will be accepted between March 22nd and April 26, 2011. The rule will be effective on July 1, 2011.

● Service Connection By An Electric Utility

The authorization for an electric utility to connect or re-connect an electrical service is limited in the electrical law. For all services – both new and existing services where power has been disconnected from the premises wiring system – there must always be a permit posted on the jobsite. The electric utility is only authorized to connect or re-connect power based upon RCW 19.28.101(2) and (5). Below are the only scenarios when a utility is authorized to connect or re-connect power:

1. RCW 19.28.101(5) – The electric utility may connect a new service if:
 - Approval has been granted by the electrical inspector; and
 - Approval is posted or otherwise communicated by the inspector to the utility,
2. RCW 19.28.101(2) – The electric utility has the discretion to connect a service when:
 - It can verify that a permit is posted on the jobsite; and
 - The electrical inspector has received a written request for inspection, but cannot complete the inspection within twenty-four hours; and
 - If the service relates to a mobile home, a current building permit from the local building official is posted.
3. RCW 19.28.101(5) – The electric utility has the discretion to immediately reconnect a service that has been increased in size or relocated before the inspector’s approval if an electrical permit is posted.

In scenario 2 and 3, the utility may choose to not connect power until the inspection is complete and approved. For instance, if the customer asks the utility to disconnect power so that a main service breaker or other equipment can be replaced or repaired and the service has not been increased or relocated, the utility is only allowed to re-connect power when all the requirements in scenario 1 or 2 are fully met.

● Answer to This Month’s Question of the Month:

15 milliamperes in a male or 9 milliamperes in a female for .43 seconds (IEEE).

Electrical Section Internet Address: <http://www.Lni.wa.gov/TradesLicensing/electrical>

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